

Fig. 1

## SWNT Ropes

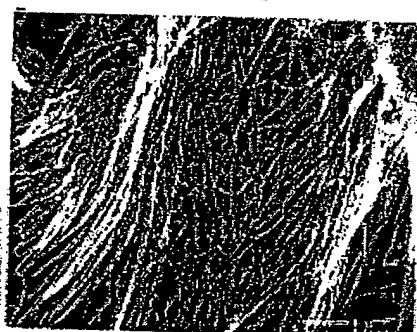


FIG. 2A

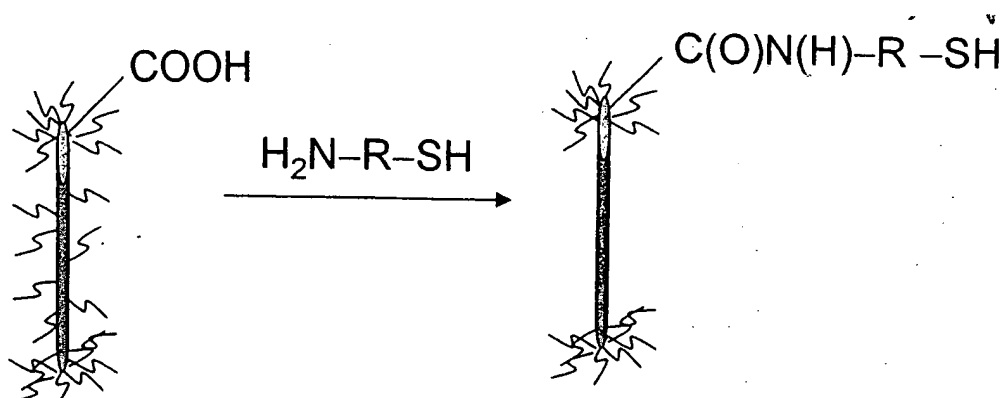
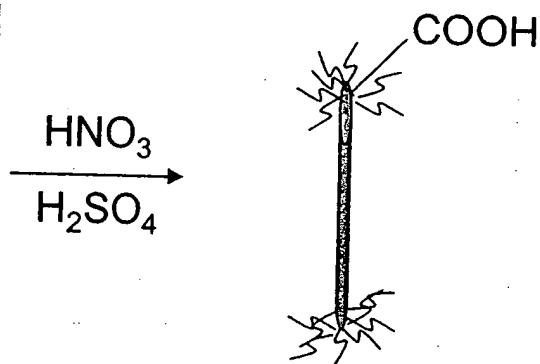


FIG. 2 B

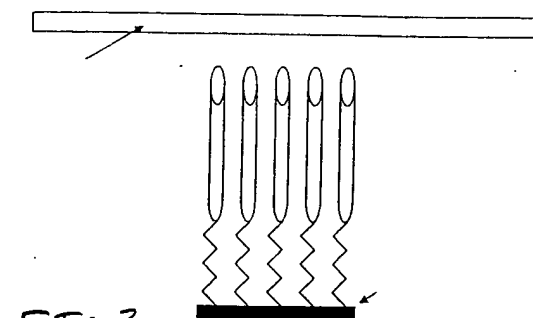


FIG. 3

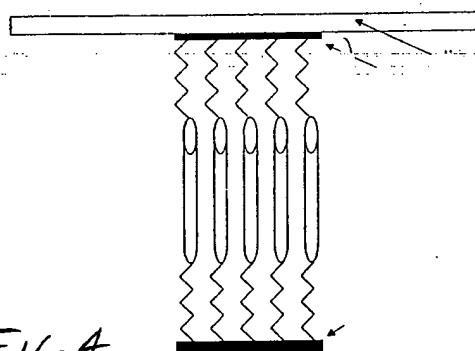


FIG. 4

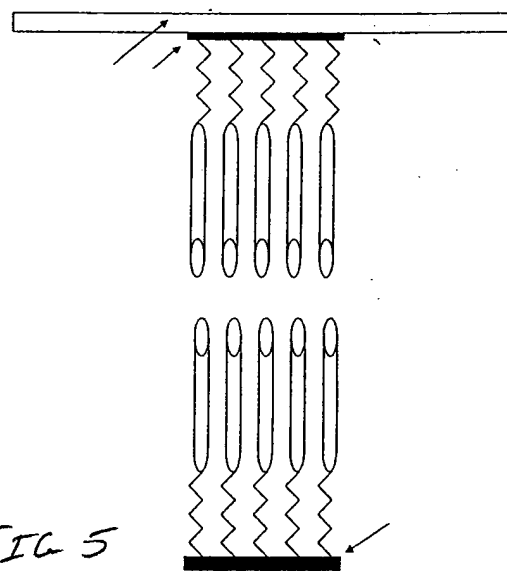


FIG. 5

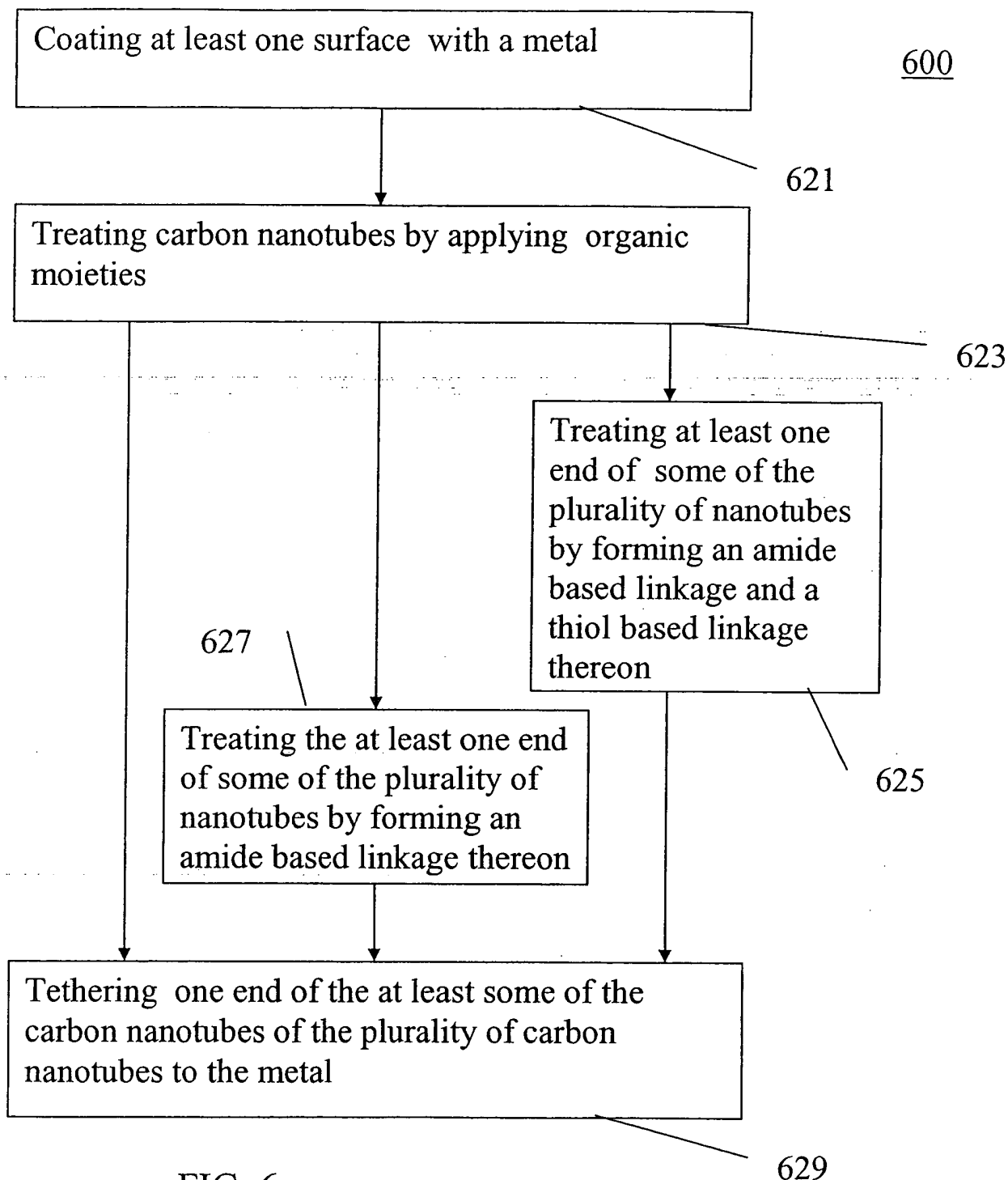


FIG. 6

700

Oxidizing nanotube ropes to cut them into short nanotubes with open ends having carboxyl linkages attached thereto

723

Applying organic moieties to the open ends

725

Tethering an end of the short nanotubes to a surface of a first object

727

Placing a surface of a second object in contact with another end of the short nanotubes to form a thermal path between surface of the first object and the surface of the second object

729

FIG. 7

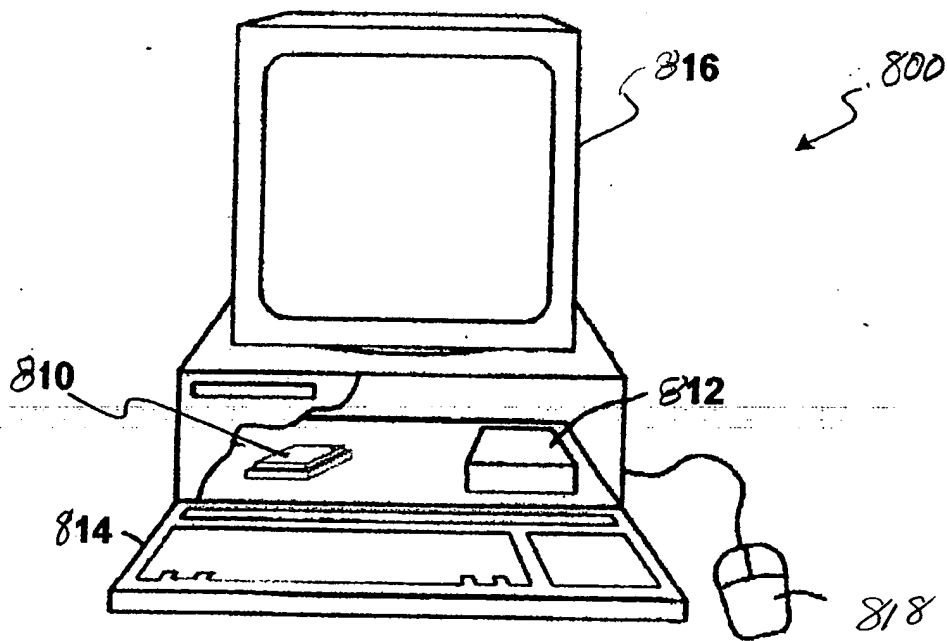


FIG. 8